



**UNITED STATES DEPARTMENT OF COMMERCE**  
**United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

cb

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER

ART UNIT	PAPER NUMBER

**DATE MAILED:**

This is a communication from the examiner in charge of this application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**NOTICE OF ALLOWABILITY**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

This communication is responsive to \_\_\_\_\_

The allowed claim(s) is/are 19-21.

The drawings filed on \_\_\_\_\_ are acceptable as formal drawings.

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

All  Some\*  None of the:

Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No. 09/982108.

Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION. This three-month period for complying with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL is extendable under 37 CFR 1.136(a).**

Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

Applicant MUST submit NEW FORMAL DRAWINGS

because the originally filed drawings were declared by applicant to be informal.

including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. \_\_\_\_\_.

including changes required by the proposed drawing correction filed on \_\_\_\_\_, which has been approved by the examiner.

including changes required by the attached Examiner's Amendment/Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings.

Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this notice should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

Interview Summary, PTO-413

Examiner's Amendment/Comment

Examiner's Comment Regarding Requirement for the Deposit of Biological Material

Examiner's Statement of Reasons for Allowance

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Nelson on October 13, 2004.

In claim 19, line 2, before "an" the comma (,) has been deleted and the word -- and -- has been inserted. In line 6, "in that" has been deleted and the phrase – and further wherein – has been substituted therefor.

In claim 20, line 6, after "mixtures" the comma (,) has been deleted and -- thereof – has been inserted. In line 8, after "hydrogen" a comma (,) has been inserted.

In claim 21, line 8, after "mixtures" the comma (,) has been deleted and -- thereof -- has been inserted. In line 14, after "solution" a comma (,) has been inserted. In line 15, after "reactor" a comma (,) has been inserted. In line 17, after "or" the word - - a -- has been inserted.

The following is an examiner's statement of reasons for allowance: Berkenbiel et al (U.S. Pat. 5,534,149), Kabisch et al (U.S. Pat. 3,423,176), and Kunkel et al (U.S. Pat. 4,428,923) all disclose methods for the production of hydrogen peroxide by the anthraquinone process wherein the working solution and a hydrogenation catalyst suspended in the reaction mixture are continuously circulated in a reactor. Birkenbiel et al, Kabisch et al and Kunkel et al do not teach, disclose or suggest that the compound to be hydrogenated and the hydrogen should be mixed before entering the reactor.

Hopkins (U.S. Pat. 4,428,922) discloses a method for producing hydrogen peroxide by the anthraquinone process in a fixed-bed catalytic hydrogenator operating in the dispersed-bubble flow regime, wherein the hydrogen gas and the working solution are premixed by means of a static mixer. There would be no motivation for one of ordinary skill in the art to modify the process of Birkenbiel et al, Kabisch et al or Kunkel et al by premixing the hydrogen and anthraquinone, as disclosed by Hopkins, since the processes of Birkenbiel et al, Kabisch et al and Kunkel et al are directed to processes wherein the hydrogenation catalyst is suspended in the reaction mixture and recirculated, whereas the process of Hopkins is directed to a process employing a fixed-bed catalyst wherein the hydrogenator is operated in the dispersed-bubble flow regime.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Wayne Langel at telephone number 571-272-1353.

  
Wayne Langel  
Primary Examiner  
Art Unit 1754